

Digital transformation: Connecting in vivo teams to the wider R&D ecosystem

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In research and development (R&D), the integration of digital technologies has revolutionized collaboration and efficiency. However, the transition towards digital transformation has not been uniform across all R&D teams. In vivo teams, although crucial for testing and validation in academia, pharmaceutical and biotech organisations, find themselves isolated or siloed from the broader R&D ecosystem due to their lag in digital transformation. There are inherent challenges faced by in vivo teams, which primarily rely on traditional, labour-intensive methods for experimentation and data collection. While other R&D sectors embrace digital tools for data analysis, simulation, and virtual collaboration, in vivo teams often lag behind due to the unique complexities of their work. This creates a disconnect, hindering seamless integration and knowledge sharing across the R&D spectrum. The consequences of this siloing include inefficiencies arising from manual data processing, limited accessibility to findings, and slower innovation cycles within in vivo research. Moreover, the lack of digital integration inhibits interdisciplinary collaboration, impeding the holistic understanding and advancement of research objectives. This presentation looks at the urgent need for in vivo teams to undergo digital transformation. It advocates for strategic initiatives aimed at fostering technological adaptation, promoting cross-functional collaboration, and redefining organizational structures to bridge the gap between in vivo and other R&D domains. Ultimately, addressing this disparity holds the potential to enhance research outcomes, accelerate discovery processes, and propel scientific innovation forward.